PATENT

Atty Docket No.: 10017990-1
App. Ser. No.: 10/020,256

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the amendments above and the following remarks. Claims 1, 11, 19, 21, 24, and 26 have been amended herein. Support for the amendments may be found in original claims 19 and 21 and page 17 of the originally filed specification. Therefore, claims 1-33 are currently pending of which claims 1, 11, and 24 are independent. No new matter has been introduced by way of the claim amendments and entry thereof is respectfully requested.

Claims 1-5, 11, 15-18, 24, and 29-33 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Blanchard (6,072,542) ("Blanchard") in view of Fogel (5,619,566) ("Fogel").

Claims 6, 7, 25, and 27 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Blanchard in view of Fogel in view of Ellis et al. (U.S. Pub. No. 2005/0020223) ("Ellis").

Claims 8 and 12 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Blanchard in view of Fogel in view of Nonomura et al. (6,094,234) ("Nonomura").

Claims 9, 10, 13, and 14 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Blanchard in view of Fogel in view of Setogawa et al. (5,822,024) ("Setogawa").

These rejections are respectfully traversed for the reasons stated below.

Allowable Subject Matter

Claims 19-23, 26, and 28 were objected to as being dependent upon a rejected base claims, but allowable if rewritten in independent form. Accordingly, subject matter from claims 19 and 21 has been included in independent claims 1, 11, and 24.

Claim Rejection Under 35 U.S.C. §103

The test for determining if a claim is rendered obvious by one or more references for purposes of a rejection under 35 U.S.C. § 103 is set forth in *KSR International Co. v. Teleflex Inc.*, 550 U.S._, 82 USPQ2d 1385 (2007):

"Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented." Quoting *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966).

According to the Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in view of *KSR International Co. v. Teleflex Inc.*, Federal Register, Vol. 72, No. 195, 57526, 57529 (October 10, 2007), once the *Graham* factual inquiries are resolved, there must be a determination of whether the claimed invention would have been obvious to one of ordinary skill in the art based on any one of the following proper rationales:

> (A) Combining prior art elements according to known methods to yield predictable results; (B) Simple substitution of one known element for another to obtain predictable results; (C) Use of known technique to improve similar devices (methods, or products) in the same way; (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results; (E) "Obvious to try"—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success; (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art; (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention. *KSR International Co. v. Teleflex Inc.*, 550 U.S._, 82 USPQ2d 1385 (2007).

Furthermore, as set forth in *KSR International Co. v. Teleflex Inc.*, quoting from *In re Kahn*, 441 F. 3d 977, 988 (CA Fed. 2006), "[R]ejections on obviousness grounds cannot be

sustained by mere conclusory statements; instead, there must be some articulated reasonings with some rational underpinning to support the legal conclusion of obviousness."

Furthermore, as set forth in MPEP 2143.03, to ascertain the differences between the prior art and the claims at issue, "[a]ll claim limitations must be considered" because "all words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385.

If the above-identified criteria and rationales are not met, then the cited references fail to render obvious the claimed invention and, thus, the claimed invention is distinguishable over the cited references.

Claims 1-5, 11, 15-18, 24, and 29-33 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Blanchard in view of Fogel. This rejection is respectfully traversed because Blanchard and Fogel, taken alone or in combination, fail to teach or suggest the features of independent claims 1, 11, and 24, and the claims that depend therefrom.

Independent claim 1 has been amended herein to recite, *inter alia*:

> said memory further storing a predetermined energy threshold, a predetermined ZCR variance threshold, and a predetermined ZCR amplitude span threshold;
>
> wherein said audio event detecting means includes an energy detector, which detects an audio event in said audio data by measuring an energy content of said audio data and indexes said video data at about a beginning of said audio event and, wherein said audio event detecting means further includes a ZCR detector for generating a ZCR value from said audio data and comparing a ZCR variance and a ZCR value span of said audio data to the predetermined ZCR variance threshold and to said predetermined ZCR amplitude span threshold, respectively, if said energy content satisfies said predetermined energy threshold,

Independent claim 11 has been amended herein to recite, *inter alia*, that:

> said audio event detector includes an energy detector communicating with said processor and a ZCR detector communicating with said processor; and
>
> a memory communicating with said processor, said memory storing video data and audio data corresponding to said video data, said memory further storing a predetermined energy threshold, a predetermined ZCR amplitude span threshold, and a predetermined ZCR variance threshold;
>
> wherein said audio event detector detects an audio event in said audio data by measuring an energy content of said audio data, generating a ZCR

value from said audio data, and comparing a ZCR variance and a ZCR value span of said audio data to the predetermined ZCR variance threshold and to the predetermined ZCR amplitude span threshold, respectively, if said energy content satisfies said predetermined energy threshold.

Independent claim 24 has been amended herein to recite, *inter alia*, that:

comparing a ZCR variance and a ZCR value span of said audio data to a predetermined ZCR variance threshold and to a predetermined ZCR amplitude span threshold, respectively, if said energy content satisfies said predetermined energy threshold.

Blanchard fails to teach at least the features recited above, including "a ZCR detector for generating a ZCR value from said audio data," and "comparing a ZCR variance and a ZCR value span... if said energy content satisfies said predetermined energy threshold," as recited by independent claim 1, 11, and 24.

The Applicant notes that these features were previously recited in original claims 19 and 21, both of which were indicated as allowable, because Blanchard, like Fogel and the remaining prior art of record, fails to teach or suggest these features. Blanchard is drawn to a video recording and logging device which includes an apparatus to detect scene changes. Blanchard measures the amplitude of background audio levels to detect scene changes. Blanchard is silent with respect to a ZCR detector for generating a ZCR value and comparing ZCR values.

Similarly, Fogel is directed to a voice activity detector, which measures energy in a signal. Fogel is silent with respect to a ZCR detector for generating a ZCR value and comparing ZCR values.

For at least the foregoing reasons, it is respectfully submitted that Blanchard and Fogel fail to teach or suggest the features of independent claims 1, 11, and 24. Accordingly, the Examiner is respectfully requested to withdraw the rejection of claims 1, 11, and 24 and to allow these claims.

Claims 2-5, 15-18, and 29-33 are also allowable over Blanchard and Fogel at least by virtue of their respective dependencies upon allowable claims 1, 11, and 24.

Claims 6, 7, 25, and 27 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Blanchard in view of Fogel in view of Ellis. This rejection is respectfully

traversed because Blanchard, Fogel, and Ellis, taken alone or in combination, fail to teach or suggest the features of claims 6, 7, 25, and 27.

As set forth above, Blanchard and Fogel fail to teach or suggest the features of independent claims 1 and 24 from which claims 6, 7, 25, and 27 depend, respectively. Ellis fails to cure the deficiencies of Blanchard and Fogel. Therefore, claims 6, 7, 25, and 27 are allowable, at least, by virtue of their respective dependencies on allowable claims 1 and 24.

For at least the foregoing reasons, it is respectfully submitted that the Office Action has failed to establish a *prima facie* case of obvious against claims 6, 7, 25, and 27. The Examiner is therefore respectfully requested to withdraw this rejection and to allow these claims.

Claims 8 and 12 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Blanchard in view of Fogel and Nonomura. This rejection is respectfully traversed because Blanchard, Fogel, and Nonomura, taken alone or in combination, fail to teach or suggest the features of claims 8 and 12.

As set forth above, Blanchard and Fogel fail to teach or suggest the features of independent claims 1 and 11 from which claims 8 and 12 depend, respectively. Nonomura fails to cure the deficiencies of Blanchard and Fogel. Therefore, claims 8 and 12 are allowable, at least, by virtue of their respective dependencies on allowable claims 1 and 11.

For at least the foregoing reasons, it is respectfully submitted that the Office Action has failed to establish a *prima facie* case of obvious against claims 8 and 12. The Examiner is therefore respectfully requested to withdraw this rejection and to allow these claims.

Claims 9, 10, 13, and 14 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Blanchard in view of Fogel and Setogawa. This rejection is respectfully traversed because Blanchard, Fogel, and Setogawa, taken alone or in combination, fail to teach or suggest the features of claims 9, 10, 13, and 14.

As set forth above, Blanchard and Fogel fail to teach or suggest the features of independent claims 1 and 11 from which claims 9, 10, 13, and 14 depend, respectively. Setogawa fails to cure the deficiencies of Blanchard and Fogel. Therefore, claims 9, 10, 13,

and 14 are allowable, at least, by virtue of their respective dependencies on allowable claims 1 and 11.

For at least the foregoing reasons, it is respectfully submitted that the Office Action has failed to establish a *prima facie* case of obvious against claims 9, 10, 13, and 14. The Examiner is therefore respectfully requested to withdraw this rejection and to allow these claims

Conclusion

In light of the foregoing, withdrawal of the rejections of record and allowance of this application are earnestly solicited.

Should the Examiner believe that a telephone conference with the undersigned would assist in resolving any issues pertaining to the allowability of the above-identified application, please contact the undersigned at the telephone number listed below. Please grant any required extensions of time and charge any fees due in connection with this request to deposit account no. 08-2025.

Respectfully submitted,

Dated: February 6, 2008 By

Ashok K. Mannava
Registration No.: 45,301

MANNAVA & KANG, P.C.
11240 Waples Mill Road
Suite 300
Fairfax, VA 22030
(703) 652-3822
(703) 865-5150 (facsimile)